

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/043696

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N5/06 C12N5/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBASE, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SCHULDINER MAYA ET AL: "Effects of eight growth factors on the differentiation of cells derived from human embryonic stem cells" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE, WASHINGTON, DC, US, vol. 97, no. 21, 10 October 2000 (2000-10-10), pages 11307-11312, XP002184277 ISSN: 0027-8424 the whole document ----- -/--	1-35, 62, 73-75

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

25 October 2005

Date of mailing of the international search report

08/11/2005

Name and mailing address of the ISA

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 Int'l Application No
 PCT/US2004/043696

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ABE K ET AL: "Endoderm-specific gene expression in embryonic stem cells differentiated to embryoid bodies" EXPERIMENTAL CELL RESEARCH, SAN DIEGO, CA, US, vol. 229, no. 1, November 1996 (1996-11), pages 27-34, XP002985524 ISSN: 0014-4827 the whole document</p>	1-75
A	<p>GOUMANS M-J ET AL: "MOUSE EMBRYONIC STEM CELLS WITH ABERRANT TRANSFORMING GROWTH FACTORBETA SIGNALLING EXHIBIT IMPAIRED DIFFERENTIATION IN VITRO AND IN VIVO" DIFFERENTIATION, SPRINGER VERLAG, DE, vol. 63, no. 3, July 1998 (1998-07), pages 101-113, XP002927459 ISSN: 0301-4681 the whole document</p>	1-75
A	<p>MCGRATH KATHLEEN E ET AL: "Embryonic expression and function of the chemokine SDF-1 and its receptor, CXCR4" DEVELOPMENTAL BIOLOGY, vol. 213, no. 2, 13 September 1999 (1999-09-13), pages 442-456, XP002350816 ISSN: 0012-1606 abstract</p>	
A	<p>ANG SIEW-LAN ET AL: "The formation and maintenance of the definitive endoderm lineage in the mouse: Involvement of HNF3/forkhead proteins" DEVELOPMENT (CAMBRIDGE), vol. 119, no. 4, 1993, pages 1301-1315, XP002350817 ISSN: 0950-1991 abstract</p>	
A	<p>KANAI-AZUMA MASAMI ET AL: "Depletion of definitive gut endoderm in Sox17-null mutant mice" DEVELOPMENT (CAMBRIDGE), vol. 129, no. 10, May 2002 (2002-05), pages 2367-2379, XP002350818 ISSN: 0950-1991 abstract</p>	

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	TIEDEMANN H ET AL: "Pluripotent cells (stem cells) and their determination and differentiation in early vertebrate embryogenesis" DEVELOPMENT GROWTH AND DIFFERENTIATION, JAPANESE SOCIETY OF DEVELOPMENTAL BIOLOGISTS,, JP, vol. 43, no. 5, October 2001 (2001-10), pages 469-502, XP002335237 ISSN: 0012-1592 the whole document	
P,X	KUBO A ET AL: "Development of definitive endoderm from embryonic stem cells in culture" DEVELOPMENT, COMPANY OF BIOLOGISTS, CAMBRIDGE,, GB, vol. 131, no. 7, April 2004 (2004-04), pages 1651-1662, XP002985523 ISSN: 0950-1991 the whole document	1-75
P,X	WO 2004/098490 A (MOUNT SINAI SCHOOL OF MEDICINE OF NEW YORK UNIVERSITY; KELLER, GORDON,) 18 November 2004 (2004-11-18) the whole document	1-75

Information on patent family members

PCT/US2004/043696

Form PCT/ISA/210 (patent family annex) (January 2004)

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